

## NAVISTAR, INC

HEAVY DUTY ENGINE EMISSIONS REMEDIAL RECALL PLAN

TO: Mr. Justin Greuel  
 Director, Diesel Engine Compliance Center  
 United States Environmental Protection Agency  
 USEPA  
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 1200 Pennsylvania Avenue NW  
 Washington, DC 20460

FROM: Nelson Borja  
 Emissions Certification and Compliance  
 Navistar, Inc.  
 2601 Navistar Dr.  
 Lisle, IL 60532

REFERENCE NO. VER 14510

DATE : July 15, 2014

cc: Fahkri Hamady  
 Ron Schaefer

The following Remedial (Recall) Plan and associated information is submitted in accordance with 40 C.F.R. §1068.510, and §1068.515.

[40 C.F.R. § 1068.501(2)(d)(1)]. MANUFACTURER INFORMATION

Navistar, Inc.  
 2601 Navistar Dr.  
 Lisle, IL 60532

[40 CFR §1068.510(a)(1)]. DESCRIPTION OF CLASS/CATEGORY OF VEHICLE/ENGINE POTENTIALLY AFFECTED

This defect affects medium service class trucks equipped with medium-heavy class certified diesel engines that are sold in the United States.

	DURASTAR	WORKSTAR	IC BUS	TOTAL
<b>MY 2010</b>				
ANVXH04660GA	3705	1382	440	5527
<b>MY 2011</b>				
BNVXH04660GA	6922	3085	792	10799
<b>MY 2012</b>				
CNVXH04660GA	5316	3023	786	9125
<b>Grand Total:</b>	<b>15943</b>	<b>7490</b>	<b>2018</b>	<b>25451</b>

[40 CFR §1068.510(a)(2)]. DESCRIPTION AND SCOPE OF WORK OR OTHER CHANGES TO BE MADE TO BRING THE VEHICLES OR ENGINES INTO CONFORMITY INCLUDING A BRIEF SUMMARY OF STUDIES, TESTS, AND DATA THAT SUPPORT THE EFFECTIVENESS OF THE REMEDY

*This plan is being submitted for the Medium-Heavy Duty engine families: ANVXH04660GA, BNVXH04660GA, and CNVXH04660GA, the problems being addressed have to do with abnormally high DPF soot regeneration frequency.*

[40 CFR §1068.510(a)(3)]. DESCRIPTION OF THE STUDIES, TESTS, AND DATA THAT SUPPORT THE EFFECTIVENESS OF THE REMEDY

*See attached relevant documents and as submitted to eVerify.*

[40 CFR §1068.510(a)(4)]. THE SERVICE PROCEDURE AND DEALER INSTRUCTIONS TO REMEDY THE REPORTED DEFECT.

*See attached Service Procedure (AFC 14510), and Customer Notification letters (AFC 14510).*

[40 CFR §1068.510(a)(5)]. A DESCRIPTION OF METHOD TO DETERMINE THE CUSTOMER NAMES AND ADDRESSES.

*Navistar will use the identical protocol that it employs to determine the addresses of vehicle / engine owners for vehicles or engines under NHTSA Safety Recalls. Engine serial numbers are matched to VINs, which are then searched for current owner names and addresses who are then notified by first class mail. For vehicles older than three years, state department of motor vehicle (DMV) data (R.L. Polk) is used.*

[40 CFR §1068.510(a)(6)]. A DESCRIPTION OF METHOD TO NOTIFY OWNERS INCLUDING OWNER NOTIFICATION LETTERS.

*Navistar will notify owners by first class mail. See attached Customer Notification letter (AFC 14510).*

[40 CFR §1068.510(a)(7)] A DESCRIPTION OF THE PROPER MAINTENANCE, IF ANY, AS A CONDITION FOR THE CUSTOMER TO BE ELIGIBLE FOR REPAIR UNDER THE REMEDIAL PLAN. A DESCRIPTION HOW THESE SPECIFICATION MEET THE PROVISION OF PARAGRAPH (e). A DESCRIPTION HOW THE OWNERS SHOULD SHOW THEY MEET CONDITION OF ELIGIBILITY UNDER THE REMEDIAL PLAN.

*There are no additional maintenance obligations that will become necessary as a result of the remedial action.*

[40 CFR §1068.510(a)(8)]. A DESCRIPTION OF THE CUSTOMER MUST TAKE STEPS TO DO THE REPAIR AND WHERE THE LABEL WOULD BE PLACED.

*The customer must bring the vehicle to International Dealer and copy of Customer Notification letter with the corresponding customer name and address.*

*The label will be placed in the chassis “B” pillar.*

**[40 CFR §1068.510(a)(9)] A DESCRIPTION OF WHO WILL PERFORM OR MANAGE THE REPAIRS.**

*Only Navistar dealers or authorized warranty agents will implement the remedy. All Navistar dealers have technicians trained to perform the necessary tasks.*

**[40 CFR §1068.510(a)(10)]. A DESCRIPTION ON WHO ARE QUALIFIED AND AUTHORIZED TO PERFORM THE WORK.**

*Only Navistar dealers or authorized warranty agents will implement the remedy. All Navistar dealers have technicians trained to perform the necessary tasks.*

**[40 CFR §1068.510(a)(11)]. A DESCRIPTION TO ENSURE AN ADEQUATE AND TIMELY SUPPLY OF PARTS.**

*No parts are necessary and all Navistar dealers are in possession of the tools necessary to perform this work.*

**[40 CFR §1068.510(a)(12)]. A DESCRIPTION OF THE IMPACT OF THE PROPOSED CHANGES ON FUEL CONSUMPTION, DRIVEABILITY, AND SAFETY OF THE VEHICLES or ENGINES TO BE RECALLED AND A BRIEF SUMMARY OF THE DATA, TECHNICAL STUDIES, OR ENGINEERING EVALUATIONS WHICH SUPPORT THESE CONDITIONS..**

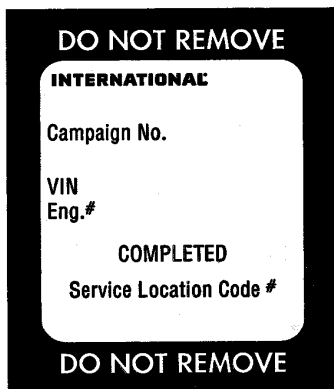
*Navistar will conduct a field campaign to correct the ECM calibration that controls aftertreatment regeneration. The affected emission controls and remedy are described below:*

- *Regeneration level 1 and level 2 calibration updates to improve regeneration performance:*
  - *Modify intake throttle valve position*
  - *Reduce EGR valve position*
  - *Modify injection timing*
  - *Add boost-based timing during acceleration in regeneration mode to prevent engine stumble.*

- *The new calibration effect on exhaust aftertreatment Upward Adjustment Factor (UAF) was verified as maintaining the certified levels of all criteria pollutants. EPA was notified of a field fix on May 16, 2014, that contained all related engine test data. ARB is in receipt of the same test data. A summary of the emissions test data is contained in Figure 1 below.*

**[40 CFR §1068.510(a)(13)] & [40 CFR 1068.515(a)(c)]. A SAMPLE OF LABEL TO BE APPLIED TO VEHICLES or ENGINES WHICH PARTICIPATE IN THE VOLUNTARY REMEDIAL CAMPAIGN.**

*Example of label for vehicles that receive the repair. The label will be placed in the chassis "B" pillar.*



Please contact me if you have any questions.

Respectfully,

Thomas M. Kramer

Cc: file

July 114, 2014

## Summary of Emissions Test Results Used for Field Fix on Navistar Medium Heavy Engine Families

(Ref Navistar AFC14510)

*Note: Emissions qualification submitted to EPA on May 16<sup>th</sup> concerning a Navistar field campaign under AFC14503 is identical to this EDIR and field fix. This is because the underlying engine calibration is identical for both OBD and non-OBD engine types. The lead rating of each engine family is used to demonstrate compliance.*

Engine Family DNVXH04660GA		Multiplicative DF and IRAF Applied			
		Test Levels	DF	Final result	FEL/STD
FTP	NMHC	0.036	1.000	0.04	0.14
	CO	1.29	1.00	1.3	15.5
	NOx	0.402	1.000	0.47	0.47
	PM	0.002	1.000	0.00	0.01
USSET	NMHC	0.005	1.000	0.01	0.14
	CO	0.03	1.00	0.0	15.5
	NOx	0.355	1.000	0.43	0.47
	PM	0.001	1.000	0.00	0.01

Engine Family DNVXH05700GA		Multiplicative DF and IRAF Applied			
		Test Levels	DF	Final Result	FEL/STD
FTP	NMHC	0.005	1.000	0.01	0.14
	CO	5.77	1.00	5.7	15.5
	NOx	0.363	1.000	0.40	0.45
	PM	0.001	1.000	0.00	0.01
USSET	NMHC	0.002	1.000	0.00	0.14
	CO	0.20	1.00	0.2	15.5
	NOx	0.348	1.000	0.45	0.45
	PM	0.000	1.000	0.00	0.01

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